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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/656,392	09/05/2003	Trebor Heminway	MKPA-107US	9588
23122	7590	09/27/2005	EXAMINER	
RATNERPRESTIA P O BOX 980 VALLEY FORGE, PA 19482-0980			JOHNSON, JONATHAN J	
			ART UNIT	PAPER NUMBER

1725

DATE MAILED: 09/27/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/656,392

Applicant(s)

HEMINWAY ET AL.

Examiner

Jonathan Johnson

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 August 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) 9-15 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7 is/are rejected.
- 7) ☒ Claim(s) 8 is/are objected to.
- 8) ☒ Claim(s) 1-15 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|----------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>7-21-05</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-6 are rejected under 35 U.S.C. 102(b) as being anticipated by Shiga et al. (EP-0346596A2) or US Patent (4,055,683). Shiga et al. teaches a solder preform for attaching an optical fiber having a diameter to a fiber attach pad, the solder preform comprising a body including solder at least on a bottom surface thereof, the body having a groove extending along a first face from a first end to a second, the groove being larger in size than the optical fiber to allow alignment of the optical fiber within the groove such that the solder perform is configured to permit alignment of the optical fiber in first and second directions when groove of the solder perform is placed over the optical fiber (abstract and Figures); the height of the groove is larger than the diameter of the optical fiber, allowing a range of clearance above and below the optical fiber (abstract and Figures); the width of the groove is larger than the diameter of the optical fiber, allowing a range of clearance on at least a side of the optical fiber (abstract and Figures); (abstract and Figures) the body is formed as a geometric solid with at least one substantially flat face; and the geometric solid is selected from a group consisting of a rectangular box, a cubical box, a cylinder, a semi-cylinder, a semi-sphere, a pyramid, and a cone (abstract and Figures); the body is formed from a metallic material "solder" (abstract and Figures).

Claims 1-6 are rejected under 35 U.S.C. 102(b) as being anticipated by Boisgontier et al. (4,984,866). Boisgontier et al. teaches a solder preform for attaching an optical fiber having a diameter to a fiber attach pad, the solder preform comprising a body including solder at least on a bottom surface thereof, the body having a groove extending along a first face from a first end to a second, the groove being larger in size than the optical fiber to allow alignment of the optical fiber within the groove such that the solder perform is configured to permit alignment of the optical fiber in first and second directions when groove of the solder perform is placed over the optical fiber (column 12, lines 16-21 and Figures); the height of the groove is larger than the diameter of the optical fiber, allowing a range of clearance above and below the optical fiber (column 12, lines 16-21 and Figures); the width of the groove is larger than the diameter of the optical fiber, allowing a range of clearance on at least a side of the optical fiber (column 12, lines 16-21 and Figures); the body is formed as a geometric solid with at least one substantially flat face; and the geometric solid is selected from a group consisting of a rectangular box, a cubical box, a cylinder, a semi-cylinder, a semi-sphere, a pyramid, and a cone (column 12, lines 16-21 and Figures); the body is formed from a metallic material "solder" (column 12, lines 16-21 and Figures).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person

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having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Shiga et al. (EP-0346596A2) or US Patent (4,055,683) as applied to claim 1 above, and further in view of Enochs (4,702,547). Shiga et al. teaches all of the limitations of the claims except that the body is formed from a glass material. Enochs teaches the body is formed from a glass "silicon" material (Summary of Invention and column 4, line 56-column 5, line 30). The gold layer formed on the surface of the silicon retaining member constitutes the solder of claim 1. It is obvious to one of ordinary skill in the art that the solder could have been adhered to either the pad or the retaining member since both surfaces are relative to each other. At the time of the invention it would have been obvious to one of ordinary skill in the art to combine the silicon member of Enochs with the solder member of Shiga et al. in order to form a retaining member that maintains its shape during the soldering process.

Allowable Subject Matter

Claim 8 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

As a matter of clarification, applicant states "the EP '596 reference and US '683 reference are corresponding patent applications." This is not true. The US reference claims priority to UK

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1,010,543, which was printed in 1965. In addition, the EP reference was filed in 1989 while the US reference was filed in 1976.

Applicant argues US '683 teaches aligning the optical fiber before the solder perform is placed over the optical fiber. Similarly, applicant argues that, in Boisogontier, alignment never occurs and that in Enochs, the optical fiber is not larger in size than the groove and is not configured to permit alignment. The examiner agrees. Applicant goes on to argue, however, that the references do not teach the claim 1 limitation "the solder perform is configured to permit alignment of the optical fiber in first and second directions when groove of the solder perform is placed over the optical fiber." The examiner disagrees.

The examiner understands that, as with any other claim limitation, functional language is acceptable so long as it sets definite boundaries on the patent protection sought. In re Barr, 170 USPQ 33 (CCPA 1971). A recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. See In re Casey, 152 USPQ 235 (CCPA 1967) and In re Otto, 136 USPQ 458, 459 (CCPA 1963). To put it another way: While the features of an apparatus or product may be recited either structurally or functionally, claims directed to an apparatus or product must be distinguished from the prior art in terms of structure rather than function. In the instant case, as stated in the previous office action, it is the examiner's position that the performs of the prior art could be capable of performing the alignment function as they have all of the structural limitations of applicant's claimed invention. The examiner notes that applicant has neither argued or provided any extrinsic evidence showing

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that the prior art's perform cannot perform in the claimed manner. The rejection is maintained despite applicant's traversal.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).


A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jonathan Johnson whose telephone number is 571-272-1177. The examiner can normally be reached on M-Th 7:30 AM-5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tom Dunn can be reached on 571-272-1171. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Jonathan Johnson
Primary Examiner
Art Unit 1725

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